

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A method for transmitting data packets over a network to selected multiple remote destinations, the method comprising the steps of:

embedding in a first data packet a list of multiple remote destination addresses corresponding to each of the selected multiple remote destinations, wherein the embedding step further comprises:

embedding in a header section of an internetworking protocol (IP) data packet a specially formatted IP options field; and

setting a code byte within the IP options field to a specified value to indicate that the data packet is a DAMP data packet;

providing an addressing protocol by which networking elements are capable of accessing the list of multiple remote destination addresses; and

instructing networking elements to transmit a copy of the first data packet to each of the selected multiple remote destinations corresponding to each of the addresses in the list of multiple remote destination addresses.

2. (original): The method of claim 1, further comprising using the network elements to transmit the data packets without having the data packets travel over any segment of the network more than once.

3. (original): The method of claim 2, further comprising transmitting the data packets to the selected multiple remote destinations without using a subscription service to initiate delivery of the data packets.

4. (cancelled).

5. (original): The method of claim 1 further comprising including network storage devices in the list of selected multiple remote destinations.

6. (currently amended): The method of claim 1 wherein the instructing step further comprises:

instructing network switches or routers receiving the first data packet to copy the first data packet into one or more second data packets, wherein copying the first data packet comprises:

creating one or more second data packet copies of the received first data packet;

zeroing out each IP address in the list of selected multiple remote destinations that is not directly accessible beyond the network switch or router receiving the first data packet; and

setting a destination IP address field in each second data packet to one of the non-zeroed IP addresses in the list of selected multiple remote destinations in the second data packet; and

transmitting the one or more second data packets to ~~the~~ a directly accessible remote destination or network element indicated for each non-zeroed IP address in the list of selected multiple remote destinations embedded in the one or more second data packets.

7. (currently amended): A system for transmitting data packets over a network to selected multiple remote destinations, the system comprising:

a directly addressed multicast protocol (DAMP) client;

a network infrastructure;

multiple network devices remotely located from the DAMP client and the network infrastructure; and

data packets for carrying data between the DAMP client and the multiple network devices, wherein the data packets are internetworking protocol (IP) data packets and further comprise a header section containing a specially formatted IP options field, the IP options field comprising a code byte set to a specific value signifying that the data packet is a DAMP data packet.

8. (original): The system of claim 7 wherein the data packets do not travel over any segment of the network more than once.

9. (original): The system of claim 8 wherein the selected multiple remote destinations do not initiate delivery of the data packets through a subscription service.

10. (original): The system of claim 7 wherein the network infrastructure further comprises network switches and routers.

11. (cancelled).

12. (original): The system of claim 7 wherein the multiple network devices include network storage devices.

13. (currently amended): A computer readable medium on which is embedded a program, the program comprising modules that execute a method for transmitting data packets over a network to selected multiple remote destinations, the method comprising the steps of:

embedding in a first data packet a list of multiple remote destination addresses corresponding to each of the selected multiple remote destinations, wherein the embedding step further comprises:

embedding in a header section of an internetworking protocol (IP) data packet a specially formatted IP options field; and

setting a code byte within the IP options field to a specified value to indicate that the data packet is a DAMP data packet;

providing an addressing protocol by which networking elements are capable of accessing the list of multiple remote destination addresses; and

instructing networking elements to transmit a copy of the first data packet to each of the selected multiple remote destinations corresponding to each of the addresses in the list of multiple remote destination addresses.

14. (original): The computer readable medium of claim 13, further comprising using the network elements to transmit the data packets without having the data packets travel over any segment of the network more than once.

15. (original): The computer readable medium of claim 14, further comprising transmitting the data packets to the selected multiple remote destinations without using a subscription service to initiate delivery of the data packets.

16. (cancelled).

17. (original): The computer readable medium of claim 13, further comprising including network storage devices in the list of selected multiple remote destinations.

18. (currently amended): The computer readable medium of claim 13 wherein the instructing step further comprises:

instructing network switches or routers receiving the first data packet to copy the first data packet into one or more second data packets, wherein copying the first data packet comprises:

creating one or more second data packet copies of the received first data packet;

zeroing out each IP address in the list of selected multiple remote destinations that is not directly accessible beyond the network switch or router receiving the first data packet; and

setting a destination IP address field in each second data packet to one of the non-zeroed IP addresses in the list of selected multiple remote destinations in the second data packet; and

transmitting the one or more second data packets to ~~the~~ a directly accessible remote destination or network element indicated for each non-zeroed IP address in the list of selected multiple remote destinations embedded in the one or more second data packets.

19: (new): The method of claim 1, wherein the IP options field includes a number of four-byte IP addresses, one for each of the selected multiple remote destinations, and wherein the embedding step further comprises setting a length byte to a determinable value to indicate the length of the IP options field.

20: (new): The system of claim 7, wherein the IP options field further comprises:

a length byte set to a determinable value specifying the length of the IP options field;
and

a number of four-byte IP addresses, one for each of the selected multiple remote destinations.

21: (new): The computer readable medium of claim 13, wherein the IP options field includes a number of four-byte IP addresses, one for each of the selected multiple remote

destinations, and wherein the embedding step further comprises setting a length byte to a determinable value to indicate the length of the IP options field.